Trade Developments

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Measuring Competitiveness and Labor Productivity in Cambodia's Garment Industry

Executive Summary

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Elimination of global textile and apparel trade quotas on January 1, 2005 has brought about a dramatic shift in the world market for textiles and apparel products. China, with its vast supply of labor, significant upstream capacity in textiles manufacturing, efficient garment factories, and well-developed logistics infrastructure, has achieved breathtaking gains in exports in just the first few months of quota-free trade. Suppliers such as Mexico, South Korea, Mauritius, and South Africa, among others, have clearly suffered in comparison. Downward pressure on world prices has been strong in the first few months of unrestrained competition.

Cambodia's garment industry on the whole has managed to hold its own in the early months of this new era. Cambodian producers may be benefiting from uncertainty among U.S. and EU buyers, many of which are retaining multiple sources of supply while waiting to see how safeguard actions (new quotas) against China undertaken by the United States and European Union in early 2005 will play out. But safeguards will not last forever. The question for Cambodian producers is whether they can be cost-competitive when safeguards are lifted.

The purpose of this report is to identify strategies for improving the competitiveness of Cambodia's garment industry, while maintaining Cambodia's strong record on labor standards. We emphasize, in particular, the substantial scope for increasing labor productivity though improved management systems and training. In the innovative factory-level research summarized and analyzed in this report, we have studied the competitive strengths and weaknesses of Cambodia's garment manufacturers, benchmarking productivity in Cambodia against that of garment industries elsewhere.

Cambodian Context

One quarter million Cambodians are employed in the garment industry, and a multiple of that number is employed in supporting sectors. Workers are mainly women from rural villages; their remittances back home sustain an estimated 20 percent of the country's 13 million people. Garment exports have grown dramatically over the past decade, from $26 million in 1995 to $1.6 billion in 2004. Apparel now accounts for nearly 80 percent of the country's merchandise exports.

Most factories belong to foreign owners, mainly from China, Hong Kong, Taiwan, and Korea. All garment production is sold for export. The United States, which buys roughly two-thirds of Cambodia's exports, and the European Union, which buys most of the rest, are Cambodia's primary export markets. As much as one-third of Cambodia's garments are manufactured for one brand label client, The Gap. Other brand labels figure prominently in Cambodia's production for export.

The 1999 U.S.-Cambodia Bilateral Textile Agreement linked quota access in the U.S. market to factories' compliance with international labor standards, as monitored by the International Labor Organization. Cambodia has subsequently earned a reputation among buyers as a socially responsible manufacturing platform from which to source garments.

In the post-quota environment, however, filling the social-responsibility niche cannot compensate for a lack of competitiveness on other fronts. To remain in the pool of acceptable suppliers, Cambodian factories must remain competitive. Working with authorities to address the costs of administrative red tape and corruption, estimated by a recent Cambodian government report to amount to 7 percent of total sales value, is part of the answer. Toward this end, Cambodia is committed to improving the investment climate by introducing streamlined trade facilitation procedures.

Cambodian factories can also address competitiveness through management decisions. Yet they must do so without lowering wages, restricting benefits, or skimping on the working environment, any of which risks worker strikes, a reduction in quality, or the deterrence of foreign investors. The central challenge to Cambodian producers' continued success and ability to beat the competition is to retain their standing as socially responsible manufacturers while improving productivity and efficiency.

Methodology

Recognizing the importance of improved productivity for firms' competitiveness, as well as for national economic growth, the U.S. Agency for International Development supported a survey of productivity and efficiency in Cambodian garment factories, focusing on labor productivity and its determinants. Over a six-week period in February and March 2005, industry experts and economists collected data from more than 80 factories in Cambodia through interviews, site visits, and questionnaires. Industry experts then analyzed the results, benchmarking them relative to each other and to data from five countries with similar or slightly higher hourly labor costs. They also conducted an econometric analysis of the determinants of labor productivity in the sample factories.

Findings

Among garment factories in Cambodia, the degree of technological and managerial sophistication varies widely. Only 7 percent of the Cambodian factories surveyed operate what could be considered world-class enterprises; more than three-fourths have significant potential for upgrading; and the rest lag behind enough that they will find it difficult to thrive in the post-quota environment of heightened global competition.

However, most factories require both technical and managerial training. Cambodia's apparel factories have tremendous potential for increased productivity, provided that they apply sufficient interest, effort, and resources to basic production techniques and managerial disciplines. Improvements in productivity of 15 to 20 percent can be achieved; along with this productivity gain, Cambodia can move up the value chain to produce higher-quality and higher-value garments.

The following observations apply to nearly all of the Cambodian apparel factories surveyed:

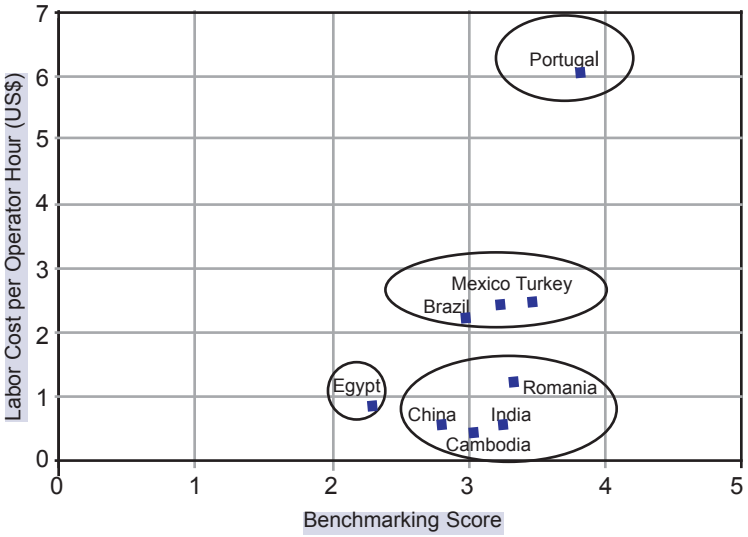
- Training is weak; poor methods are therefore retained or transmitted rather than reviewed and remedied.
- Management information systems are deficient; inappropriate, inaccurate, or late data raise overhead costs.
- Machines are typically operated inefficiently, and equipment maintenance is often inadequate. Lack of investment in maintenance, plus ineffective spare parts stock control, often leads to considerable lost production.
- Many factories do not employ work-study (time measurement) methods and thus have no formal standards against which to evaluate operators; this lack of standards impedes quality control and efforts to ensure product consistency.
- Staffing levels are generally too high relative to international best practice. This results from poor recruitment and supervisory practices as well as inadequate training.
- The range of products produced emphasizes basic construction and design, with very little added value. This forces Cambodian producers to compete directly with other low-wage countries.

Comparing Cambodian benchmarking scores with those of other countries with similar or slightly higher hourly labor costs is instructive. Countries with higher labor costs, such as Portugal, perform better in terms of their benchmarking scores (Figure 1). A second group of countries–Mexico, Brazil, and Turkey–have higher labor costs than Cambodia and achieve benchmarking scores somewhat higher than or similar to Cambodian producers.

Located close to large consumer markets, they enjoy competitive advantages in transport and logistics costs and higher design input. A third group of countries, including Cambodia, have comparable labor costs and benchmarking performance. Most factories in these countries do not sell directly to buyers, but are integrated into the global supply chain through foreign home officers or buying agents. The potential for improvement is substantial for these countries. Industries in the fourth group of countries, represented by countries like Egypt, lag far behind in efficiency and productivity.

Figure 1

Comparison of Cambodian Garment Industry with Benchmark Countries



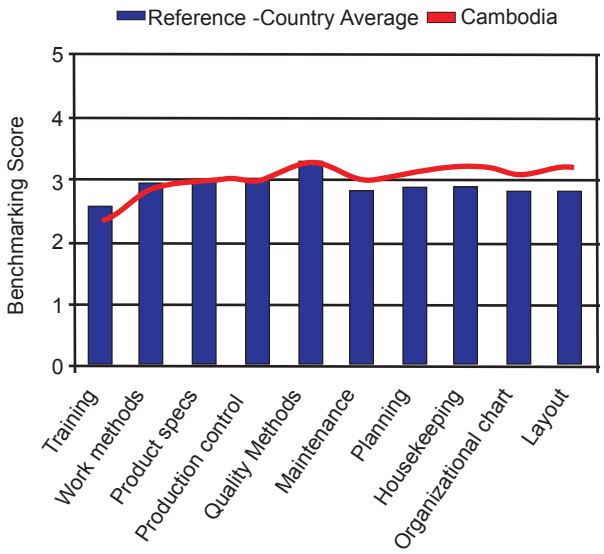
SOURCE: *Werner International.*

A more detailed inter-country comparison of the specific factors that contribute to performance reveals Cambodia's deficiencies in training, work methods, and use of production specifications (Figure 2). Only a few Cambodian factories devote the needed time, space, or financial resources to training. The lack of training, combined with the weak capability of mid-level managers, results in poor engineering and a poor understanding of optimal work flow. Managers are also often unaware that proper implementation of controls, planning, and engineering can have a strong, positive effect on productivity and the efficiency of operations.

The econometric analysis of the determinants of labor productivity, moreover, suggests that management variables, such as the relative importance of indirect personnel and the presence of an industrial engineering department, are as important as advanced

Figure 2

Factor-specific Benchmarking: Cambodia vs. Five Reference Countries, 2005



SOURCE: *Werner International.*

technology use in determining factories' labor productivity. This finding has significant implications for factory managers and their investment decisions because it demonstrates that it pays to invest in people and systems as well as in equipment.

Recommendations

The most effective and lowest-cost strategy for raising labor productivity and quality in Cambodia's garment factories is training to address Cambodia's weaknesses in professional development, production controls and engineering, and organization of work. The highest priority is to train Cambodians in middle management –line supervisors and industrial engineering personnel. These are the positions that have the greatest effect on the efficiency of resource use in the plant. Training for other positions, including operators and mechanics, is also desirable. Training should emphasize not only cost reduction methods, but also ways to improve efficiency in production, quality control, planning, and information systems.

Most apparel companies do not have the in-house expertise or the resources to implement these recommendations. The establishment of a garment industry productivity training center would therefore help develop human resource capacity in this area. Initially, international experts would train local personnel. When trainees have gained sufficient knowledge and expertise, they

would replace the expatriate experts in delivering productivity-enhancing advisory services to the industry. A number of practical issues in setting up such a center need to be considered, including modalities for financing, institutional affiliation and participation, and organizational structure.

Beyond the immediate requirements of its garment industry, Cambodia has other, longer-term training and institutional development needs. If Cambodia succeeds in making productivity gains while retaining its reputation for adhering to labor standards, foreign investment will continue to flow into the country. Demand for operational, technical, and managerial skills in the garment industry will continue to grow, as will demand for workers with practical job skills. And, if Cambodia moves up the development ladder to other types of manufacturing, it will need a workforce skilled in other technical, management, and trade-related areas. These longer-term requirements for education, training, and institutional development should be considered as government, industry, labor, and private and public foreign partners prepare for Cambodia's industrial and commercial future.

Contacts

John Ellis, CTO
Cognizant Technical Officer
The Trade Capacity Building Project
USAID/Washington
jellis@usaid.gov
202/712-5711

Paul Mason
Economic Growth and Development Officer
USAID/Cambodia
pmason@usaid.gov
(855) 23-216-436/8 ext. 311

Ms. Erin Endean, Chief of Party
The Trade Capacity Building Project
Nathan Associates Inc.
2101 Wilson Boulevard, Suite 1200
Arlington, VA 22201
eendean@nathaninc.com
703/516-7702